

## Experiences and perceptions of MS and pregnancy among Hispanic Americans

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## Background

- Multiple sclerosis (MS) is an immunomediated demyelinating disease of the central nervous system
- gender ratio (female/male) varying from 2:1 to 3:1<sup>1</sup>
- MS frequently affects women and in fertile age<sup>2</sup>
- During pregnancy, a complex modulation of immune responses takes place<sup>2</sup>
- This immunological balance seems to positively influence the short-term course of MS,<sup>3</sup>
  - a reduction in relapse rate during pregnancy(third trimester)
  - a 3 x relapse increase during the first trimester after delivery<sup>4,5</sup>
- Recent data suggests pregnancy after MS onset may also be associated with a slower long-term disability progression.<sup>6</sup>

1. Koch-Henriksen N, et al *Lancet Neurol* 2010; 9: 520–533.  
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## Hispanics and Pregnancy

- Half of pregnancies in the United States are unintended, with the highest proportions occurring among minority populations:
  - African American and Hispanics
- Common practices among Hispanics:
  - Higher fertility rate (2.4 vs. whites 1.8)<sup>1</sup>
  - Start at earlier age (birth peaks in 20s vs. white 30s)<sup>2</sup>
  - prevalence of breastfeeding
    - whites (74.0–76.4%) and Hispanics (73.6–81.9)<sup>2</sup>

1. Pew research center *Social & Demographic Trends*  
 2. Progress in Increasing Breastfeeding and Reducing Racial/Ethnic Differences — United States, 2000–2008 Births

## Hispanics with MS

- General lack of adequate education and understanding about MS, known resources, and realistic expectations about treatments among Hispanic Americans with MS<sup>1</sup>
- Less is known of the experience and perceptions of pregnancy in Hispanics with multiple sclerosis.
- We sought to explore women's experiences of pregnancy with MS to help make recommendations for care.

Shabas D, Heffner M. Multiple sclerosis management for low-income minorities. Mult Scler 2005;11: 635-640

## Methods

- We conducted a qualitative study in a total of 37 Hispanic women with MS living in the greater Los Angeles area.
  - 30 had successful pregnancy experience.
- Marital status, education, experiences and perceptions of MS during and after pregnancy were recorded using semi-structured telephone interviews.
- Breastfeeding practice was also recorded
- The participants also rated their perceived severity of MS on a scale of 0-5 with higher number indicating greater severity.

## Demographics

	Median	Range
Age	42	25,64
Age at diagnosis	30	18,43
Disease duration	9	2, 24

Sociodemographics	N	%
<b>Marital status</b>		
Married	16	53.3
Never married	5	16.7
Divorced	7	23.3
Widowed	2	6.7
<b>Education</b>		
Grade school/High school	8	26.7
Technical school (< or =2 years)	1	3.3
Some college (>2 years)	9	30.0
College (4-5 years)	7	23.3
Graduate school	5	16.7
<b>Employment status</b>		
Full-time	8	26.7
Part-time	1	3.3
Retired	3	10.0
Disabled	5	16.7
Stay at home mom	1	3.3
Unemployed	12	40.0
<b>Pregnancy</b>		
Number of pregnancy		
Median (min, max)	2	(1,10)

## Perception of pregnancy with MS

- The most commonly reported concerns were:
  - fear of passing MS to their kids (15%)
  - fear of relapsing or worsening of MS (10%)
  - being scared in general (10%)
- These women also expressed concerns regarding their physical limitations and the resulting burden on family members.

## Perceived MS symptoms during pregnancy (n=26)

Eight women (27%) believed that pregnancy + influenced the MS symptoms

Eight women (27%) did not

About 30% (n=10) of the women believed that pregnancy negatively affected their MS symptoms

Change in MS during 1<sup>st</sup> pregnancy (N=30)

	No change	Worse/Better	<i>P value*</i>
<b>Marital status</b>			
Not married	12	2	
Married	14	2	1.00
<b>Education</b>			
Less than college	16	2	
College/Graduate	10	2	1.00
<b>Work</b>			
Unemployed/retired/disabled/stay-home-mom	19	3	
Full-time	7	1	1.00

None of the sociodemographic factors were associated with change in MS.

# Relapse perception during pregnancy

## Relapse during pregnancy

### 1<sup>st</sup> Pregnancy (n=30)

Only one woman indicated having relapse during their first pregnancy.

### 2<sup>nd</sup> Pregnancy (N=21)

Three of the 21 women who had more than 1 pregnancies indicated having relapse during their 2<sup>nd</sup> pregnancy.

#### Sociodemographics and medical conditions by relapse status during 1<sup>st</sup> pregnancy

	No relapse	Relapse	P value*
<b>Marital status</b>			
Not married	13	1	
Married	16	0	0.47
<b>Education</b>			
Less than college	17	1	
College/Graduate	12	0	1.00
<b>Work</b>			
Unemployed/retired/disabled/stay-home-mom	21	1	
Full-time	8	0	1.00

On a scale of 0 to 5, the mean level of perceived severity of MS was 3.2

#### Characteristics of participants and perceived severity of MS

	N	Median	P value*
<b>Marital status</b>			
Not married	14	4	
Married	16	3	0.29
<b>Education</b>			
Less than college	18	3	
College/Graduate	12	5	0.45
<b>Work</b>			
Unemployed/retired/disabled/stay-home-mom	22	3	
Full-time	8	3.5	0.83

## Breastfeeding Practice

- The mean duration of breastfeeding was 16 weeks (66%, n=20)
- There was no statistically significant association between breastfeeding and reported improvement ( $P=1.00$ ) or worsening of MS symptoms post-partum 1st pregnancy ( $P=0.42$ )
- In 10%, the preconception of MS transmission through their breast milk prompted a fear of whether or not to continue breastfeeding.

## Conclusions

- 1/3 of Hispanic females with MS had a poor perception of Pregnancy
- Perceptions of postpartum and relapse during that time are under review
- Breastfeeding practice was seen in 66% (below National expected practice)
- Recommendations for MS care
  - Pregnancy in the setting of MS needs to be discussed
  - Breastfeeding should also be part of the discussion
- Further research is necessary to identify factors that influence these perceptions and investigate how they may differ from AA and whites

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